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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,397	10/16/2003	Hiroaki Fujinami	117543	6686
25944 7590 03/21/2007 OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER NGUYEN, THU V	
			ART UNIT 3661	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			03/21/2007	
			DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/685,397

Applicant(s)

FUJINAMI ET AL.

Examiner

Thu Nguyen

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/28/06</u> . | 6) ☐ Other: _____ |

DETAILED ACTION

The amendment filed on December 28, 2006 has been entered. By this amendment, claim 4 has been canceled, and claims 1-3, 5-8 are now pending in the application. Based on the submitted IDS filed on December 28, 2006 and the newly found references of Seto et al (US 2003/0067219), the indicated allowed claims 1-3, 5-6 is herein withdrawn. A new ground of rejection is herein established.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Masami (JP 10-138894) (enclosed IDS).

As per claim 1, Masami discloses a device for controlling a braking force of a vehicle, the device comprises: a braking force boosting control portion that increases the braking force in response to a detection of a possibility of a collision with an obstacle in a driving course of the vehicle (para 0002, 0004); and a boost-reducing control portion that controls the boosting control portion so as to reduce the braking force when a steering operation is executed by a driver of the vehicle as compared to a braking force to be generated when no steering operation is executed, thereby reducing the braking force and allowing the driver to avoid a collision

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through the steering operation executed by the driver (last 5 lines of the abstract, para 0008, 0011), wherein the boost-reducing control portion controls a reduction in the braking force based upon a lateral force on a steered wheel estimated from the steering operation by the driver (para 0014) and a motional condition of the vehicle (the evasion capacity and the power of the vehicle) (para 0011-0012, 0020, 0027-0031, 0038-0039).

As per claim 5, since Masami teaches adjusting the brake force as a function of the lateral force (para 0011-0012, 0020), Masami encompasses teaching increasing the reduction in the braking force when the estimated lateral force on the steered wheel is high as compared to the reduction in the braking force to be set when the estimated lateral force on the steered wheel is low.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masami (JP 10-138894) (enclosed IDS) in view of Seto et al (US 2003/0067219).

As per claim 2, refer to claim 1 above. Claim 2 discloses similar subject matter disclosed in claim 1 above except for a boost-reducing control portion that controls the boosting control portion so as to reduce the braking force based on a lateral force on a wheel of the vehicle, when it is judged that the collision is avoidable by a steering operation of a driver of the

vehicle as compared to a braking force to be generated when it is judged that the collision is inevitable by the steering operation. Masami does not explicitly disclose the claimed limitation. However, Seto teaches applying the brake force depending on the capability of avoiding collision by steering (para 0060-0064). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the capability to adjust the brake force according to collision avoidance possibility as taught by Seto to the apparatus taught by Masami in order to ensure optimal collision avoidance without excessive brake application to enhance safety to the vehicle.

As per claim 3, refer to discussion in claim 2 above.

Allowable Subject Matter

5. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 7-8 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

Prior arts of record do not disclose a device for controlling a braking force of a vehicle disclosed in claim 1 in combination with claim 6, or in claim 7 or 8 in which the boost-reducing control portion controls the boosting control portion so that the braking force on a steered wheel is smaller than that on a non-steered wheel.

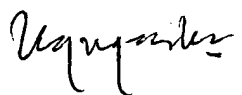
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 19, 2007


THU V. NGUYEN
PRIMARY EXAMINER